What is claimed is:

1. A rotation transfer mechanism of a lens barrel, comprising:

a pair of rotatable rings, adjacent ends of which are opposed to each other in a rotational axis direction extending in an optical axis direction;

at least one axial-direction projection extending in said rotational axis direction;

at least one axial-direction recess in which said axial-direction projection is positioned, said axial-direction projection and said axial-direction recess respectively located on one and the other of said adjacent ends of said pair of rotatable rings;

at least one rotation transfer groove located on an inner peripheral surface of the one of said pair of rotatable rings that has said axial-direction projection, wherein a circumferential position of said rotation transfer groove corresponds to a circumferential position of said axial-direction projection, such that a portion of said rotation transfer groove in said rotational axis direction is associated with said axial-direction projection;

a driven rotational member having at least one rotation transfer protrusion engaged in said rotation transfer groove, said rotation transfer protrusion

slidably movable in said rotation transfer groove in said rotational axis direction and configured to transmit rotation of said rotatable ring to said driven rotational member; and

at least one optical element configured to be driven by said driven rotational member.

2. The rotation transfer mechanism according to claim 1, wherein said axial-direction projection engages said axial-direction recess to transfer rotation of said one of the pair of rotatable rings directly to the other of the pair of rotatable rings having the axial-direction recess.

3. The rotation transfer mechanism according to claim 1, wherein a plurality of said rotation transfer grooves are located at different circumferential positions;

wherein a plurality of said rotation transfer protrusions are located at different circumferential positions;

wherein a plurality of said axial-direction projections are located at different circumferential positions;

and

wherein a plurality of said axial-direction recesses are located at different circumferential

positions.

4. The rotation transfer mechanism according to claim 1, wherein said rotation transfer mechanism comprises an advancing/retracting guide ring positioned inside said pair of rotatable rings so as not to be rotatable about said rotational axis of said pair of rotatable rings,

wherein said advancing/retracting guide ring includes at least one inclined lead slot which penetrates through said advancing/retracting guide ring and which is inclined with respect to both a circumferential direction of said advancing/retracting guide ring and said rotational axis direction of said pair of rotatable rings,

wherein said rotation transfer protrusion is slidably engaged in both said inclined lead slot and said rotation transfer groove.

5. The rotation transfer mechanism according to claim 4, wherein said advancing/retracting guide ring further comprises at least one circumferential slot which communicatively connects with said inclined lead slot and which extends in said circumferential direction of said advancing/retracting guide ring, and

wherein said rotation transfer protrusion is configured to rotate together with said pair of rotatable

rings without moving in said rotational axis direction relative to said pair of rotatable rings in a state where said rotation transfer protrusion is engaged in said circumferential slot.

6. The rotation transfer mechanism according to claim 1, wherein said portion of said rotation transfer groove that is associated with said axial-direction projection is a slot that radially penetrates through said one of said pair of rotatable rings that has said axial-direction projection, and

wherein a remaining portion of said rotation transfer groove is formed as a bottomed groove.

7. The rotation transfer mechanism according to claim 1, wherein said driven rotational member comprises a cam ring having at least one cam groove configured to move said optical element along said rotational axis in a predetermined moving manner by a rotation of said cam ring.

8. The rotation transfer mechanism according to claim 7, wherein said optical element comprises at least two optical elements that move along said rotational axis while changing a distance therebetween to vary a focal length, when said rotatable ring rotates.

9. The rotation transfer mechanism according to claim 1, wherein said lens barrel comprises a telescoping

lens barrel having a plurality of concentrically-arranged external movable barrels, wherein one of said pair of rotatable rings is one of said plurality of external movable barrels.